



DATE: December 2, 1994

FROM: Mike Thomas, ENAN Section Chief *MKT*

TO: Primary File - ESAT Analytical Activity # ADF04

ESAT's comments regarding the subject activity are as follows:

Sample Numbers: 001-019 (Soil - Total Metals)

The matrix spike and duplicate recoveries for QC samples related to the sample numbers listed above were not in control. The Laboratory Control Sample was in control. The recovery deviations for the specific QC samples are shown in Table 1.

Table 1

[SPIKE RECOVERIES VS CONTROL LIMITS]

Sample 001 Spiked

Elements	Spike Rec.	Dupl. Rec.	LCL	UCL
Silver (Ag)	127	129	*	113
Arsenic (As)	180	185	*	126
Cadmium (Cd)	131	134	*	127
Selenium (Se)	132	126	*	119
Vanadium (V)	149	146	*	122

LCL - Lower Control Limit; UCL - Upper Control Limit; * - In Control

The recovery deviations in the spike were attributed to matrix interference effects in the spiked sample.

Even though, due to matrix interferences, exact concentrations cannot be reported for elements listed in Table 1, maximum and minimum concentrations can be predicted with relative certainty. The concentration ranges are reported in Table 2.

Table 2

[Soil - Results reported in mg/Kg]

Sample #	001	002	003	004	005
Ag	0.615U	0.615U	0.615U	0.615U	0.615U
As	12.1-22.4	11.1-20.5	8.86-16.4	7.51-13.9	7.51-13.9
Cd	0.487U-0.620	0.487U	0.487U	0.487U	0.487U
Se	3.090U-3.71	3.090U	3.090U	3.090U	3.090U
V	19.7-29.3	16.3-24.3	15.0-22.4	12.3-16.8	11.0-16.4

Sample #	006	007	008	009	010
Ag	6.15U	0.615U	0.615U	0.615U	0.737-0.951
As	1.26-2.33	11.7-21.7	2.63-4.87	23.8-44.1	3.01-5.57
Cd	0.487U-6.21	0.487U	0.531-0.712	0.487U	1.10-1.48
Se	3.090U	3.090U	3.090U-3.14	3.090U	3.090U
V	3.050U	14.0-20.9	3.79-5.64	27.5-41.0	3.33-4.96
Sample #	011	012	013	014	015
Ag	0.615U	0.615U	0.615U	0.615U	0.615U
As	7.67-14.2	13.1-24.3	14.3-26.5	10.1-18.6	7.62-14.1
Cd	0.487U	0.487U	0.487U	0.487U	0.487U
Se	3.090U	3.090U	3.090U	3.090U	3.090U
V	9.40-14.0	17.4-26.0	16.4-24.4	12.8-19.0	9.76-14.5
Sample #	016	017	018	019	-----
Ag	0.615U	0.615U	0.615U	0.615U	
As	10.3-19.0	13.8-25.5	13.5-24.9	25.9-48.0	
Cd	0.487U	0.487U	0.487U	0.487U	
Se	3.090U	3.090U	3.090U	3.090U	
V	11.4-17.0	15.0-22.2	14.8-22.0	22.1-33.0	

Sample Numbers: 022-026 (Water - Total Metals)

Slight Zinc contamination was found in the Method Reagent Blank. In accordance with Laboratory policy, only those samples containing Zinc at levels less than five times the level of contamination found in the blank have been "U" coded, indicating the Method Detection Limit has been raised to the level of Zinc found in the sample. In no case would the actual level of Zinc in these samples be greater than the "U" coded value shown.

This data substantially fulfills the data requirements of the work order under which the analyses were performed.

ANALYSIS REQUEST SUPPLEMENT REPORT

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DRAFT REPORT

COMPOUND	UNITS	001	001B	001R	001S	001W
SM01 SILVER, TOTAL, BY ICAP	MG/KG	0.615 U	20.0	20.0	25.4	25.9
SM02 ALUMINUM, TOTAL, BY ICAP	MG/KG	12200	10200	10200	28700	27300
SM03 ARSENIC, TOTAL, BY ICAP	MG/KG	22.4	20.0	20.0	76.3	78.2
SM04 BARIUM, TOTAL, BY ICAP	MG/KG	161	120	120	291	292
SM05 BERYLLIUM, TOTAL, BY ICAP	MG/KG	0.923	20.0	20.0	18.5	18.9
SM06 CADMIUM, TOTAL, BY ICAP	MG/KG	0.620	20.0	20.0	27.0	27.7
SM07 COBALT, TOTAL, BY ICAP	MG/KG	7.15	20.0	20.0	29.7	29.9
SM08 CHROMIUM, TOTAL, BY ICAP	MG/KG	17.7	20.0	20.0	47.0	46.3
SM09 COPPER, TOTAL, BY ICAP	MG/KG	21.9	20.0	20.0	48.9	49.2
SM10 IRON, TOTAL, BY ICAP	MG/KG	12400	40000	40000	52200	52300
SM11 MANGANESE, TOTAL, BY ICAP	MG/KG	374	540	540	855	863
SM12 MOLYBDENUM, TOTAL, BY ICAP	MG/KG	0.393 U	20.0	20.0	16.9	17.0
SM13 NICKEL, TOTAL, BY ICAP	MG/KG	20.5	20.0	20.0	49.1	49.1
SM14 LEAD, TOTAL, BY ICAP	MG/KG	41.2	120	120	174	176
SM15 ANTIMONY, TOTAL, BY ICAP	MG/KG	2.64	220	220	197	213
SM16 SELENIUM, TOTAL, BY ICAP	MG/KG	3.70	20.0	20.0	31.2	29.9
SM18 THALLIUM, TOTAL, BY ICAP	MG/KG	3.15 U	200	200	206	214
SM19 VANADIUM, TOTAL, BY ICAP	MG/KG	29.3	20.0	20.0	73.5	71.9
SM20 ZINC, TOTAL, BY ICAP	MG/KG	114	420	420	525	534
SM21 CALCIUM, TOTAL, BY ICAP	MG/KG	13200	20000	20000	31400	31200
SM22 MAGNESIUM, TOTAL, BY ICAP	MG/KG	4580	20000	20000	20100	20100
SM23 SODIUM, TOTAL, BY ICAP	MG/KG	247	20000	20000	20300	20500
SM24 POTASSIUM, TOTAL, BY ICAP	MG/KG	1950	20000	20000	25100	25300

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ACTIVITY: 5-ADFO4

DATE: 12/01/94

DRAFT REPORT

COMPOUND

UNITS

002

003

004

005

006

SM01 SILVER, TOTAL, BY ICAP	MG/KG	0.615	U	0.615	U	0.615	U	0.615	U	6.15	U
SM02 ALUMINUM, TOTAL, BY ICAP	MG/KG	9090		8350		5070		5200		383	
SM03 ARSENIC, TOTAL, BY ICAP	MG/KG	20.5		16.4		13.9		13.9		2.33	
SM04 BARIUM, TOTAL, BY ICAP	MG/KG	141		134		90.9		95.2		3.72	
SM05 BERYLLIUM, TOTAL, BY ICAP	MG/KG	0.797		0.660		0.490		0.494		0.139	U
SM06 CADMIUM, TOTAL, BY ICAP	MG/KG	0.487	U	0.487	U	0.487	U	0.487	U	0.621	
SM07 COBALT, TOTAL, BY ICAP	MG/KG	6.65		5.44		5.51		4.99		0.664	U
SM08 CHROMIUM, TOTAL, BY ICAP	MG/KG	11.8		10.9		7.85		7.57		3.75	
SM09 COPPER, TOTAL, BY ICAP	MG/KG	14.4		11.1		5.08		5.21		0.778	
SM10 IRON, TOTAL, BY ICAP	MG/KG	11000		8790		7780		7950		1230	
SM11 MANGANESE, TOTAL, BY ICAP	MG/KG	334		277		171		187		45.8	
SM12 MOLYBDENUM, TOTAL, BY ICAP	MG/KG	0.393	U	0.398		1.38		0.393	U	3.25	
SM13 NICKEL, TOTAL, BY ICAP	MG/KG	18.5		14.2		12.7		13.6		2.63	
SM14 LEAD, TOTAL, BY ICAP	MG/KG	24.2		22.5		13.0		12.2		0.806	
SM15 ANTIMONY, TOTAL, BY ICAP	MG/KG	2.69		2.03		2.06		2.02		0.701	
SM16 SELENIUM, TOTAL, BY ICAP	MG/KG	3.09	U	3.09	U	3.09	U	3.09	U	3.09	U
SM18 THALLIUM, TOTAL, BY ICAP	MG/KG	3.15	U	3.15	U	3.15	U	3.15	U	3.15	U
SM19 VANADIUM, TOTAL, BY ICAP	MG/KG	24.3		22.4		16.8		16.4		3.05	U
SM20 ZINC, TOTAL, BY ICAP	MG/KG	66.3		56.1		31.3		30.7		19.6	
SM21 CALCIUM, TOTAL, BY ICAP	MG/KG	5750		12300		1590		1430		14800	
SM22 MAGNESIUM, TOTAL, BY ICAP	MG/KG	3290		2600		1620		1710		92900	
SM23 SODIUM, TOTAL, BY ICAP	MG/KG	113		147		140		125		205	
SM24 POTASSIUM, TOTAL, BY ICAP	MG/KG	1730		1750		805		836		123	

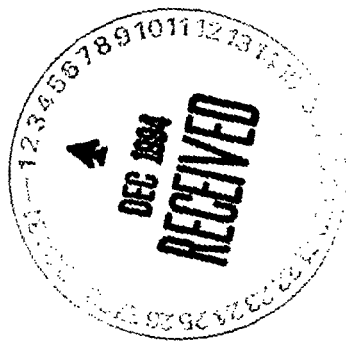
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DRAFT REPORT

COMPOUND	UNITS	007	008	009	010	011
SM01 SILVER, TOTAL, BY ICAP	MG/KG	0.615 U	6.15 U	0.615 U	0.951	0.615 U
SM02 ALUMINUM, TOTAL, BY ICAP	MG/KG	6800	1270	13400	1510	4640
SM03 ARSENIC, TOTAL, BY ICAP	MG/KG	21.7	4.87	44.0	5.57	14.2
SM04 BARIUM, TOTAL, BY ICAP	MG/KG	146	5.94	239	5.28	83.5
SM05 BERYLLIUM, TOTAL, BY ICAP	MG/KG	0.640	0.139 U	1.23	0.139 U	0.403
SM06 CADMIUM, TOTAL, BY ICAP	MG/KG	0.487 U	0.712	0.487 U	1.48	0.487 U
SM07 COBALT, TOTAL, BY ICAP	MG/KG	5.79	0.664 U	10.3	0.664 U	4.28
SM08 CHROMIUM, TOTAL, BY ICAP	MG/KG	8.87	3.04	17.5	5.23	7.43
SM09 COPPER, TOTAL, BY ICAP	MG/KG	11.1	2.37	21.3	2.50	5.36
SM10 IRON, TOTAL, BY ICAP	MG/KG	9360	2010	17400	1840	6370
SM11 MANGANESE, TOTAL, BY ICAP	MG/KG	249	75.7	582	63.3	132
SM12 MOLYBDENUM, TOTAL, BY ICAP	MG/KG	0.494	1.01	0.393 U	4.05	0.788
SM13 NICKEL, TOTAL, BY ICAP	MG/KG	16.0	3.25	32.8	5.72	10.8
SM14 LEAD, TOTAL, BY ICAP	MG/KG	16.9	2.58	30.3	3.05	14.7
SM15 ANTIMONY, TOTAL, BY ICAP	MG/KG	1.28	0.737	3.79	0.797	1.77
SM16 SELENIUM, TOTAL, BY ICAP	MG/KG	3.09 U	3.14	3.09 U	3.09 U	3.09 U
SM18 THALLIUM, TOTAL, BY ICAP	MG/KG	3.15 U	3.15 U	3.15 U	5.66	3.15 U
SM19 VANADIUM, TOTAL, BY ICAP	MG/KG	20.9	5.64	41.0	4.96	14.0
SM20 ZINC, TOTAL, BY ICAP	MG/KG	39.3	10.6	69.2	41.1	32.6
SM21 CALCIUM, TOTAL, BY ICAP	MG/KG	8060	20500	4750	21800	8170
SM22 MAGNESIUM, TOTAL, BY ICAP	MG/KG	4330	45200	4710	18600	2770
SM23 SODIUM, TOTAL, BY ICAP	MG/KG	234	337	389	343	164
SM24 POTASSIUM, TOTAL, BY ICAP	MG/KG	1090	420	2090	500	772



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DRAFT REPORT

COMPOUND	UNITS	012	013	014	015	016
SM01 SILVER, TOTAL, BY ICAP	MG/KG	0.615 U	0.615 U	0.615 U	0.615 U	0.615 U
SM02 ALUMINUM, TOTAL, BY ICAP	MG/KG	7830	10700	6150	3840	4860
SM03 ARSENIC, TOTAL, BY ICAP	MG/KG	24.3	26.5	18.6	14.1	19.0
SM04 BARIUM, TOTAL, BY ICAP	MG/KG	139	170	102	79.2	79.1
SM05 BERYLLIUM, TOTAL, BY ICAP	MG/KG	0.713	0.805	0.539	0.401	0.479
SM06 CADMIUM, TOTAL, BY ICAP	MG/KG	0.487 U	0.487 U	0.487 U	0.487 U	0.487 U
SM07 COBALT, TOTAL, BY ICAP	MG/KG	5.66	4.93	4.76	4.59	5.51
SM08 CHROMIUM, TOTAL, BY ICAP	MG/KG	10.3	12.3	9.30	6.38	7.49
SM09 COPPER, TOTAL, BY ICAP	MG/KG	13.2	13.8	7.47	3.67	5.84
SM10 IRON, TOTAL, BY ICAP	MG/KG	9890	9340	7530	6810	7800
SM11 MANGANESE, TOTAL, BY ICAP	MG/KG	498	229	111	137	164
SM12 MOLYBDENUM, TOTAL, BY ICAP	MG/KG	0.393 U	0.393 U	0.393 U	0.393 U	0.393 U
SM13 NICKEL, TOTAL, BY ICAP	MG/KG	20.8	14.0	12.5	12.8	15.4
SM14 LEAD, TOTAL, BY ICAP	MG/KG	20.5	20.0	22.2	10.5	13.4
SM15 ANTIMONY, TOTAL, BY ICAP	MG/KG	2.53	2.08	2.22	0.981	1.71
SM16 SELENIUM, TOTAL, BY ICAP	MG/KG	3.09 U	3.09 U	3.09 U	3.09 U	3.09 U
SM18 THALLIUM, TOTAL, BY ICAP	MG/KG	3.15 U	3.15 U	3.15 U	3.15 U	3.15 U
SM19 VANADIUM, TOTAL, BY ICAP	MG/KG	26.0	24.4	19.0	14.5	16.9
SM20 ZINC, TOTAL, BY ICAP	MG/KG	46.1	43.4	79.3	25.1	31.0
SM21 CALCIUM, TOTAL, BY ICAP	MG/KG	14000	21000	3550	1370	1480
SM22 MAGNESIUM, TOTAL, BY ICAP	MG/KG	5660	7620	2390	1490	1670
SM23 SODIUM, TOTAL, BY ICAP	MG/KG	167	194	260	129	250
SM24 POTASSIUM, TOTAL, BY ICAP	MG/KG	1280	1780	1100	635	684

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DRAFT REPORT

COMPOUND	UNITS	017	018	019	951G	951H
SM01 SILVER, TOTAL, BY ICAP	MG/KG	0.615 U	0.615 U	0.615 U	27.4	22.2
SM02 ALUMINUM, TOTAL, BY ICAP	MG/KG	6860	8110	17200	348	325
SM03 ARSENIC, TOTAL, BY ICAP	MG/KG	25.5	24.9	48.0	978	917
SM04 BARIUM, TOTAL, BY ICAP	MG/KG	98.2	125	148	4.98	4.80
SM05 BERYLLIUM, TOTAL, BY ICAP	MG/KG	0.659	0.692	1.24	20.7	19.4
SM06 CADMIUM, TOTAL, BY ICAP	MG/KG	0.487 U	0.487 U	0.487 U	41.8	45.4
SM07 COBALT, TOTAL, BY ICAP	MG/KG	6.49	4.84	10.5	134	144
SM08 CHROMIUM, TOTAL, BY ICAP	MG/KG	9.62	12.9	16.3	92.3	99.6
SM09 COPPER, TOTAL, BY ICAP	MG/KG	8.98	10.1	21.3	7090	6910
SM10 IRON, TOTAL, BY ICAP	MG/KG	9590	8320	20100	18300	22400
SM11 MANGANESE, TOTAL, BY ICAP	MG/KG	225	262	566	186	208
SM12 MOLYBDENUM, TOTAL, BY ICAP	MG/KG	0.393 U	0.393 U	0.393 U	46.9	0.450 40.0
SM13 NICKEL, TOTAL, BY ICAP	MG/KG	21.4	14.4	24.0	65.2	60.9
SM14 LEAD, TOTAL, BY ICAP	MG/KG	17.8	21.7	31.2	240	236
SM15 ANTIMONY, TOTAL, BY ICAP	MG/KG	2.55	1.57	3.76	288	211
SM16 SELENIUM, TOTAL, BY ICAP	MG/KG	3.09 U	3.09 U	3.09 U	46.4	39.2
SM18 THALLIUM, TOTAL, BY ICAP	MG/KG	3.15 U	3.15 U	3.15 U	54.2	39.0
SM19 VANADIUM, TOTAL, BY ICAP	MG/KG	22.2	22.0	33.0	68.6	65.8
SM20 ZINC, TOTAL, BY ICAP	MG/KG	39.0	44.3	64.5	227	187
SM21 CALCIUM, TOTAL, BY ICAP	MG/KG	1660	2730	4380	183000	196000
SM22 MAGNESIUM, TOTAL, BY ICAP	MG/KG	1950	2180	4010	103000	118000
SM23 SODIUM, TOTAL, BY ICAP	MG/KG	545	108	111	200	148 175
SM24 POTASSIUM, TOTAL, BY ICAP	MG/KG	943	1520	1670	25.5 U	198 32.0

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DRAFT REPORT

COMPOUND

UNITS

951M

SM01 SILVER, TOTAL, BY ICAP	MG/KG	0.615	U			
SM02 ALUMINUM, TOTAL, BY ICAP	MG/KG	2.00	U			
SM03 ARSENIC, TOTAL, BY ICAP	MG/KG	0.950	U			
SM04 BARIUM, TOTAL, BY ICAP	MG/KG	3.56	U			
SM05 BERYLLIUM, TOTAL, BY ICAP	MG/KG	0.139	U			
SM06 CADMIUM, TOTAL, BY ICAP	MG/KG	0.487	U			
SM07 COBALT, TOTAL, BY ICAP	MG/KG	0.664	U			
SM08 CHROMIUM, TOTAL, BY ICAP	MG/KG	0.908	U			
SM09 COPPER, TOTAL, BY ICAP	MG/KG	0.082	U			
SM10 IRON, TOTAL, BY ICAP	MG/KG	2.00	U			
SM11 MANGANESE, TOTAL, BY ICAP	MG/KG	2.70	U			
SM12 MOLYBDENUM, TOTAL, BY ICAP	MG/KG	0.393	U			
SM13 NICKEL, TOTAL, BY ICAP	MG/KG	0.535	U			
SM14 LEAD, TOTAL, BY ICAP	MG/KG	0.702	U			
SM15 ANTIMONY, TOTAL, BY ICAP	MG/KG	0.561	U			
SM16 SELENIUM, TOTAL, BY ICAP	MG/KG	3.09	U			
SM18 THALLIUM, TOTAL, BY ICAP	MG/KG	3.15	U			
SM19 VANADIUM, TOTAL, BY ICAP	MG/KG	3.05	U			
SM20 ZINC, TOTAL, BY ICAP	MG/KG	2.34	U			
SM21 CALCIUM, TOTAL, BY ICAP	MG/KG	39.0	U			
SM22 MAGNESIUM, TOTAL, BY ICAP	MG/KG	22.4	U			
SM23 SODIUM, TOTAL, BY ICAP	MG/KG	40.0	U			
SM24 POTASSIUM, TOTAL, BY ICAP	MG/KG	25.5	U			

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ANALYSIS REQUEST SUPPLEMENT REPORT

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DRAFT REPORT

COMPOUND	UNITS	022	023	024	025F	026
WM01 SILVER, TOTAL, BY ICAP	UG/L	7.88 U	7.88 U	7.88 U	7.88 U	7.88 U
WM02 ALUMINUM, TOTAL, BY ICAP	UG/L	50.7 U	50.7 U	50.7 U	50.7 U	50.7 U
WM04 BARIUM, TOTAL, BY ICAP	UG/L	3.94 U	53.3	3.94 U	3.94 U	3.94 U
WM05 BERYLLIUM, TOTAL, BY ICAP	UG/L	0.995 U	0.995 U	0.995 U	0.995 U	0.995 U
WM06 CADMIUM, TOTAL, BY ICAP	UG/L	3.69 U	3.69 U	3.69 U	3.69 U	3.69 U
WM07 COBALT, TOTAL, BY ICAP	UG/L	5.31 U	5.31 U	5.31 U	5.31 U	5.31 U
WM08 CHROMIUM, TOTAL, BY ICAP	UG/L	14.2 U	14.2 U	14.2 U	14.2 U	14.2 U
WM09 COPPER, TOTAL, BY ICAP	UG/L	8.32 U	8.32 U	8.32 U	8.32 U	8.32 U
WM10 IRON, TOTAL, BY ICAP	UG/L	65.9 U	65.9 U	65.9 U	65.9 U	65.9 U
WM11 MANGANESE, TOTAL, BY ICAP	UG/L	1.53 U	7.67	1.53 U	1.53 U	1.53 U
WM12 MOLYBDENUM, TOTAL, BY ICAP	UG/L	5.62 U	5.62 U	5.62 U	5.62 U	5.62 U
WM13 NICKEL, TOTAL, BY ICAP	UG/L	11.5 U	11.5 U	11.5 U	11.5 U	11.5 U
WM17 TITANIUM, TOTAL, BY ICAP	UG/L	15.2 U	15.2 U	15.2 U	15.2 U	15.2 U
WM19 VANADIUM, TOTAL, BY ICAP	UG/L	2.51 U	2.51 U	2.51 U	2.51 U	2.51 U
WM20 ZINC, TOTAL, BY ICAP	UG/L	17.9 U	22.4 U	10.9 U	51.8 U	14.7 U
WM21 CALCIUM, TOTAL, BY ICAP	MG/L	1.10 U	24.8	1.10 U	1.10 U	1.10 U
WM22 MAGNESIUM, TOTAL, BY ICAP	MG/L	1.03 U	15.8	1.03 U	1.03 U	1.03 U
WM23 SODIUM, TOTAL, BY ICAP	MG/L	1.61 U	10.3	1.61 U	1.61 U	1.61 U
WM24 POTASSIUM, TOTAL, BY ICAP	MG/L	1.04 U	1.34	1.04 U	1.04 U	1.04 U
WM27 ARSENIC, TOTAL, BY AA	UG/L	1.66 U	1.66 U	1.66 U	1.66 U	1.66 U
WM30 LEAD, TOTAL, BY AA	UG/L	0.557 U	0.557 U	0.557 U	0.80	0.557 U
WM31 ANTIMONY, TOTAL, BY AA	UG/L	4.37 U	4.37 U	4.37 U	4.37 U	4.37 U
WM32 SELENIUM, TOTAL, BY AA	UG/L	1.81 U	1.81 U	1.81 U	1.81 U	1.81 U
WM33 THALLIUM, TOTAL, BY AA	UG/L	1.44 U	1.44 U	1.44 U	1.44 U	2.80

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COMPOUND	UNITS	026B	026R	026S	026W	950G
WM01 SILVER, TOTAL, BY ICAP	UG/L	93.7	93.7	72.9	74.9	98.5
WM02 ALUMINUM, TOTAL, BY ICAP	UG/L	1000	1000	921	928	948
WM04 BARIUM, TOTAL, BY ICAP	UG/L	1000	1000	939	959	932
WM05 BERYLLIUM, TOTAL, BY ICAP	UG/L	100	100	92.5	94.1	91.2
WM06 CADMIUM, TOTAL, BY ICAP	UG/L	100	100	91.5	90.5	88.3
WM07 COBALT, TOTAL, BY ICAP	UG/L	100	100	91.9	92.8	89.1
WM08 CHROMIUM, TOTAL, BY ICAP	UG/L	100	100	90.2	90.2	89.4
WM09 COPPER, TOTAL, BY ICAP	UG/L	1000	1000	952	977	946
WM10 IRON, TOTAL, BY ICAP	UG/L	1000	1000	916	922	932
WM11 MANGANESE, TOTAL, BY ICAP	UG/L	1000	1000	900	914	890
WM12 MOLYBDENUM, TOTAL, BY ICAP	UG/L	100	100	95.7	98.4	97.0
WM13 NICKEL, TOTAL, BY ICAP	UG/L	1000	1000	903	919	894
WM17 TITANIUM, TOTAL, BY ICAP	UG/L	1000	1000	873	881	888
WM19 VANADIUM, TOTAL, BY ICAP	UG/L	100	100	89.5	93.2	93.5
WM20 ZINC, TOTAL, BY ICAP	UG/L	1000	1000	959	967	950
WM21 CALCIUM, TOTAL, BY ICAP	MG/L	122	122	116	117	117
WM22 MAGNESIUM, TOTAL, BY ICAP	MG/L	100	100	84.9	86.4	86.9
WM23 SODIUM, TOTAL, BY ICAP	MG/L	92.3	92.3	89.6	91.0	92.6
WM24 POTASSIUM, TOTAL, BY ICAP	MG/L	91.7	91.7	88.3	90.2	91.2
WM27 ARSENIC, TOTAL, BY AA	UG/L	50.0	50.0	36.8	40.1	47.3
WM30 LEAD, TOTAL, BY AA	UG/L	50.0	50.0	43.1	41.8	48.7
WM31 ANTIMONY, TOTAL, BY AA	UG/L	1000	1000	1110	815	921
WM32 SELENIUM, TOTAL, BY AA	UG/L	50.0	50.0	44.1	41.7	47.2
WM33 THALLIUM, TOTAL, BY AA	UG/L	50.0	50.0	34.9	31.5	43.2

ANALYSIS REQUEST SUPPLEMENT REPORT

ACTIVITY: 5-ADF04

DATE: 12/01/94

DRAFT REPORT

COMPOUND

UNITS

950H

950M

WM01 SILVER, TOTAL, BY ICAP	UG/L	93.7	7.88	U		
WM02 ALUMINUM, TOTAL, BY ICAP	UG/L	1000	50.7	U		
WM04 BARIUM, TOTAL, BY ICAP	UG/L	1000	3.94	U		
WM05 BERYLLIUM, TOTAL, BY ICAP	UG/L	100	0.995	U		
WM06 CADMIUM, TOTAL, BY ICAP	UG/L	100	3.69	U		
WM07 COBALT, TOTAL, BY ICAP	UG/L	100	5.31	U		
WM08 CHROMIUM, TOTAL, BY ICAP	UG/L	100	14.2	U		
WM09 COPPER, TOTAL, BY ICAP	UG/L	1000	8.32	U		
WM10 IRON, TOTAL, BY ICAP	UG/L	1000	65.9	U		
WM11 MANGANESE, TOTAL, BY ICAP	UG/L	1000	1.53	U		
WM12 MOLYBDENUM, TOTAL, BY ICAP	UG/L	100	5.62	U		
WM13 NICKEL, TOTAL, BY ICAP	UG/L	1000	11.5	U		
WM17 TITANIUM, TOTAL, BY ICAP	UG/L	1000	15.2	U		
WM19 VANADIUM, TOTAL, BY ICAP	UG/L	100	2.51	U		
WM20 ZINC, TOTAL, BY ICAP	UG/L	1000	16.0			
WM21 CALCIUM, TOTAL, BY ICAP	MG/L	122	1.10	U		
WM22 MAGNESIUM, TOTAL, BY ICAP	MG/L	100	1.03	U		
WM23 SODIUM, TOTAL, BY ICAP	MG/L	92.3	1.61	U		
WM24 POTASSIUM, TOTAL, BY ICAP	MG/L	91.7	1.04	U		
WM27 ARSENIC, TOTAL, BY AA	UG/L	50.0	1.66	U		
WM30 LEAD, TOTAL, BY AA	UG/L	50.0	0.557	U		
WM31 ANTIMONY, TOTAL, BY AA	UG/L	1000	4.37	U		
WM32 SELENIUM, TOTAL, BY AA	UG/L	50.0	1.81	U		
WM33 THALLIUM, TOTAL, BY AA	UG/L	50.0	1.44	U		



ANALYSIS REQUEST SUPPLEMENT REPORT

ACTIVITY: 5-ADF04

DATE: 11/29/94

DRAFT REPORT

COMPOUND

UNITS

022

022B

022R

022S

022W

WM34 MERCURY, TOTAL, BY COLD VAPOR AA

UG/L

0.100

U

1.00

1.00

0.987

1.03

ANALYSIS REQUEST SUPPLEMENT REPORT

ACTIVITY: 5-ADF04

DATE: 11/29/94



DRAFT REPORT

COMPOUND

UNITS

023

024

025F

026

960G

WM34 MERCURY, TOTAL, BY COLD VAPOR AA

UG/L

0.100

U

0.100

U

0.100

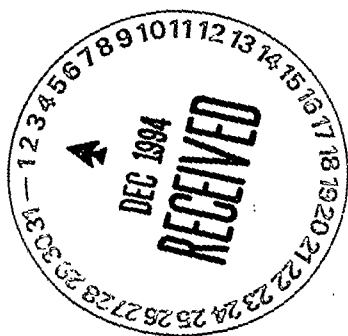
U

0.100

U

2.83





ANALYSIS REQUEST SUPPLEMENT REPORT

ACTIVITY: 5-ADF04

DATE: 11/29/94

DRAFT REPORT

COMPOUND

UNITS

960H

960M

WM34 MERCURY, TOTAL, BY COLD VAPOR AA

UG/L 2.93

0.100

U

Pr

ANALYSIS REQUEST SUPPLEMENT REPORT

ACTIVITY: 5-ADF04

DATE: 11/29/94

DRAFT REPORT

COMPOUND

UNITS

001

001B

001R

001S

001W

SM34 MERCURY, TOTAL, BY COLD VAPOR AA

MG/KG 0.0383

0.0646

0.0646

0.109

0.114

R

ANALYSIS REQUEST SUPPLEMENT REPORT

ACTIVITY: 5-ADF04

DATE: 11/29/94



DRAFT REPORT

COMPOUND

UNITS

002

003

004

005

006

SM34 MERCURY, TOTAL, BY COLD VAPOR AA

MG/KG 0.0271

0.0296

0.0199

0.0165

0.0169



ANALYSIS REQUEST SUPPLEMENT REPORT

ACTIVITY: 5-ADF04

DATE: 11/29/94

DRAFT REPORT

COMPOUND

UNITS

007

008

009

010

011

SM34 MERCURY, TOTAL, BY COLD VAPOR AA

MG/KG 0.0458

0.0151

0.0354

0.0132

0.0281

PR



ANALYSIS REQUEST SUPPLEMENT REPORT

ACTIVITY: 5-ADF04

DATE: 11/29/94

DRAFT REPORT

COMPOUND

UNITS

012

013

014

015

016

SM34 MERCURY, TOTAL, BY COLD VAPOR AA

MG/KG 0.0431

0.0372

0.0289

0.0453

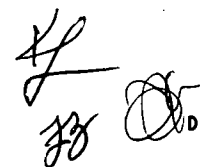
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B

ANALYSIS REQUEST SUPPLEMENT REPORT

ACTIVITY: 5-ADF04

DATE: 11/29/94



DRAFT REPORT

COMPOUND

UNITS

017

018

019

961G

961H

SM34 MERCURY, TOTAL, BY COLD VAPOR AA

MG/KG 0.0473

0.0496

0.0632

11.6

12.7

B

ANALYSIS REQUEST SUPPLEMENT REPORT

ACTIVITY: 5-ADF04

DATE: 11/29/94

KL *DR*
30 DRAFT REPORT

COMPOUND

UNITS

961M

SM34 MERCURY, TOTAL, BY COLD VAPOR AA

MG/KG 0.00389

U

R

ANALYSIS REQUEST SUPPLEMENT REPORT

ACTIVITY: 5-ADF04

DATE: 11/30/94

DRAFT REPORT

COMPOUND

UNITS

001

001B

001R

001S

001W

ST09 CYANIDE, TOTAL

MG/KG 0.040

U : 1.29

: 1.29

: 0.751

: 0.911

ANALYSIS REQUEST SUPPLEMENT REPORT

ACTIVITY: 5-ADF04

DATE: 11/30/94

DRAFT REPORT

COMPOUND

UNITS

002

003

004

005

006

ST09 CYANIDE, TOTAL

MG/KG 0.040

U

0.040

U

0.040

U

0.040

U

0.040

U

ANALYSIS REQUEST SUPPLEMENT REPORT

ACTIVITY: 5-ADF04

DATE: 11/30/94

DRAFT REPORT

COMPOUND

UNITS

007

008

009

010

011

ST09 CYANIDE, TOTAL

MG/KG

0.040

U

0.040

U

0.040

U

0.040

U

0.040

U

ANALYSIS REQUEST SUPPLEMENT REPORT

ACTIVITY: 5-ADF04

DATE: 11/30/94

DRAFT REPORT

COMPOUND

UNITS

012

013

014

015

016

ST09 CYANIDE, TOTAL

MG/KG 0.040

U

0.040

U

0.040

U

0.040

U

0.040

U

ANALYSIS REQUEST SUPPLEMENT REPORT

ACTIVITY: 5-ADF04

DATE: 11/30/94

DRAFT REPORT

COMPOUND

UNITS

017

018

019

~~025~~

952G

ST09 CYANIDE, TOTAL

MG/KG 0.040

U

0.040

U

0.040

U

*

0.675

ANALYSIS REQUEST SUPPLEMENT REPORT

ACTIVITY: 5-ADF04

DATE: 11/30/94

DRAFT REPORT

COMPOUND

UNITS

952H

952M

ST09 CYANIDE, TOTAL

MG/KG 0.630

0.040

U

ANALYSIS REQUEST SUPPLEMENT REPORT

ACTIVITY: 5-ADF04

DATE: 11/30/94

DRAFT REPORT

COMPOUND

UNITS

022

023

024

025F

026

WT09 CYANIDE, TOTAL

MG/L

0.002

U

0.002

U

0.002

U

0.002

U

0.002

U

R



ANALYSIS REQUEST SUPPLEMENT REPORT

ACTIVITY: 5-ADF04

DATE: 11/30/94



DRAFT REPORT

COMPOUND

UNITS

026B

026R

026S

026W

955G

WT09 CYANIDE, TOTAL

MG/L 0.100

0.100

0.096

0.101

0.043



ANALYSIS REQUEST SUPPLEMENT REPORT

ACTIVITY: 5-ADF04

DATE: 11/30/94

DRAFT REPORT

COMPOUND

UNITS

955H

955M

WT09 CYANIDE, TOTAL

MG/L

0.0504

0.002

U



ANALYSIS REQUEST SUPPLEMENT REPORT

ACTIVITY: 5-ADF04

DATE: 11/21/94

DRAFT REPORT

COMPOUND

UNITS

001

002

003

004

005

SG07 SOLIDS, PERCENT

%

77.4

81.6

82.3

87.3

86.1

Bz

ANALYSIS REQUEST SUPPLEMENT REPORT

ACTIVITY: 5-ADF04

DATE: 11/21/94

DRAFT REPORT

COMPOUND

UNITS

005F

006

007

008

009

SG07 SOLIDS, PERCENT

%

98.8

88.7

85.8

87.9

57.2

ANALYSIS REQUEST SUPPLEMENT REPORT

ACTIVITY: 5-ADF04

DATE: 11/21/94

DRAFT REPORT

COMPOUND

UNITS

010

011

012

013

014

SG07 SOLIDS, PERCENT

%

88.9

87.8

81.0

82.3

86.5

ANALYSIS REQUEST SUPPLEMENT REPORT

ACTIVITY: 5-ADF04

DATE: 11/21/94

DRAFT REPORT

COMPOUND

UNITS

015

016

017

018

019

SG07 SOLIDS, PERCENT

%

84.3

82.9

82.8

82.4

79.7

